

Date: Tuesday, 10/3/2006 2:49:36 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: BRACKET ASSEMBLY	
Job Number	: 28826		Part Number	: D3121144	
Estimate Number	: 10290		Drawing Number	: D3121 REV D	
P.O. Number	: N/A		Project Number	: N/A	
This Issue	: 10/3/2006 S.O. No. : N/A		Drawing Revision	: D	
Prsh Rev.	: NC		Material	: N/A	
First Issue	: N/A Type : MACHINED PARTS		Due Date	: 10/30/2006 Qty: 10 Um: Each	
Previous Run	: 26043				
Written By	: <i>John</i>				
Checked & Approved By	: <i>John</i> 06.10.03				
Comment	: Est Rev: Pick A 04.02.18 New issue KJ/DS				

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M174B1000X02000	17-4 SS Bar
Comment: Qty.: 0.3864 f(s)/Unit Total : 2.3184 f(s) Material: 17-4 SS Bar per AMS 5604/5643 (M17-4-B1.000x02.000) Identify for D3121-114 Batch: <i>M19478</i> <i>06/10/25</i>		
2.0	BAND SAW	BAND SAW
Comment: BAND SAW Cut blanks: (1.000" x 2.000") 4.425" long <i>06/10/25</i>		
3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
Comment: HAAS CNC VERTICAL MACHINING #1 1-Machine D3121-114 as per Folio FA330 and Dwg D3121 Identify as D3121-114 2-Deburr 3-Scribe batch number <i>JL/SD 06.11.04</i>		
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
Comment: INSPECT PARTS AS THEY COME OFF MACHINE <i>JL/SD 06.11.04</i>		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA:  Date: 05/11/07
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 2:49:36 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 28826

Part Number: D3121144

Job Number:



Seq. #: Machine Or Operation:

Description :

5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

3-6 06/11/06 10

6.0 D312121 Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number	Description	Batch
2 D3121-21	Bolt	<u>B28704</u>

B28835

7.0 D3121241 Bearing Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number	Description	Batch
2 D3121-241	Bearing Ass	<u>B26929</u>

8.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble D3121-143 as per Dwg D3121.

3-1 06.11.06

9.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

3-1 06.11.06

10.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST Y08

3-1 06.11.06

(10)

(10)

11.0 QC21 FINAL INSPECTION/W/O RELEASE



3-1 06.11.07

(10)

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



3-1 06.11.07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	
Description: Bracket		Part Number:	D3121-114
Inspection Dwg: D3121	Rev: D		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.080	+/-0.010	.080	✓			
0.300	+/-0.010	.300	✓			
R0.375	+/-0.010	.375	✓			
1.54	+/-0.030	1.540	✓			
0.350	+/-0.010	.350	✓			
R0.250	+/-0.010	.250	✓			
1.800	+/-0.030	1.800	✓			
Ø0.392	+0.002/-0.000	.393	✓			
Ø0.201	+0.005/-0.000	.202	✓			
0.100	+/-0.010	.099	✓			
2.540	+/-0.010	2.538	✓			
1.590	+/-0.010	1.590	✓			
0.160	+/-0.010	.160	✓			
0.400	+/-0.010	.404	✓			
1.220	+/-0.010	1.222	✓			
1.600	+/-0.010	1.600	✓			
3.80	+/-0.030	3.815	✓			
1.800	+/-0.010	1.800	✓			
R0.500	+/-0.010	.500	✓			
0.130	+/-0.010	.132	✓			
3.41	+/-0.030	3.400	✓			
3.65	+/-0.030	3.651	✓			
2.24	+/-0.030	2.230	✓			
45°	+/-0.1°	45°	✓			
R0.250	+/-0.010	.250	✓			
3.97	+/-0.030	3.970	✓			
R0.38	+/-0.030	.380	✓			
Ø0.392	+0.002/-0.000	.3925	✓			
Ø0.201	+0.005/-0.000	.202	✓			
0.100	+/-0.010	.099	✓			
0.268	+/-0.010	.270	✓			
R0.260	+/-0.010	.260	✓			
0.080	+/-0.010	.079	✓			
0.300	+/-0.010	.300	✓			

DART AEROSPACE LTD	Work Order:	28826
Description: Bracket	Part Number:	D3121-114
Inspection Dwg: D3121 Rev: D		Page 2 of 2

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

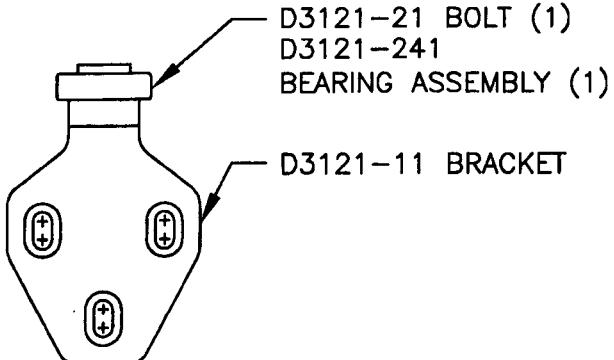
Measured by:	J.L.	Audited by:	S.	Prototype Approval:	N/A
Date:	06/11/03	Date:	06/11/03	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.12.08	New Issue P/O D3121-144	KJ/RF	
B	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM	
C	06.06.14	Dwg Rev. updated	KJ/JLM	

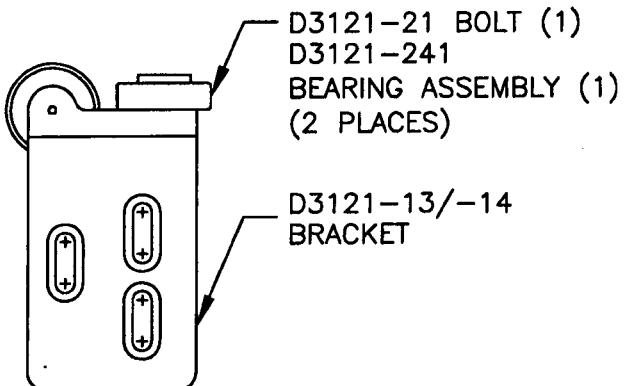
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		D3121	
DATE		TITLE	SCALE
06.05.17		BRACKET ASSEMBLY	1:2

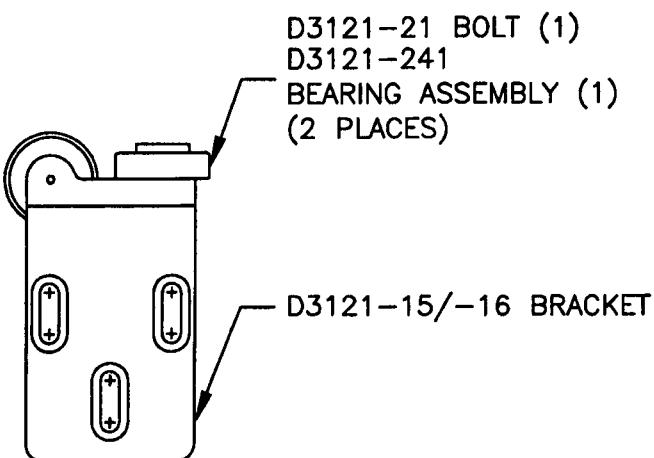
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06.06.02 *MM*

D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)



D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-35/-36)

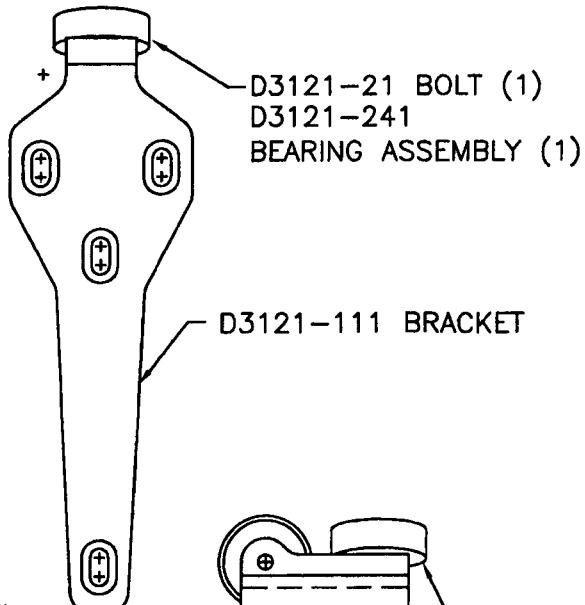
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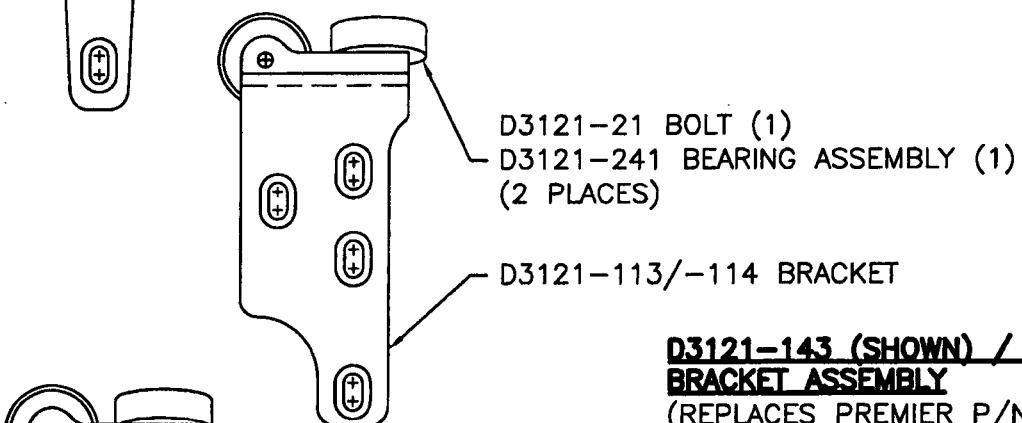
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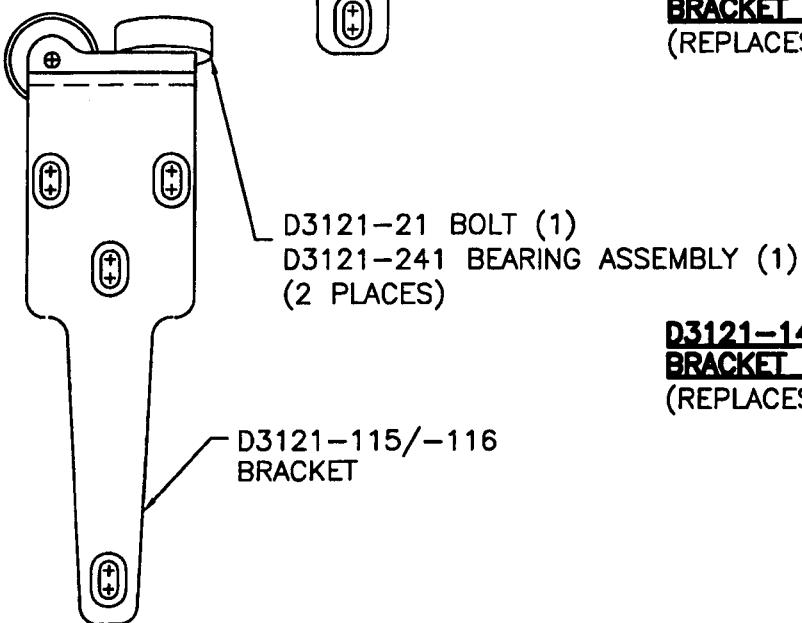
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DATE 06.05.17		TITLE BRACKET ASSEMBLY

REV. D
SHEET 2 OF 10
SCALE
1:2

D3121-141 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23001-01)



**D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-03/-04)



**D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-05/-06)

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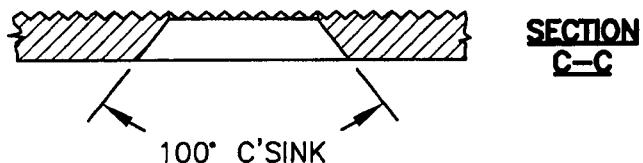
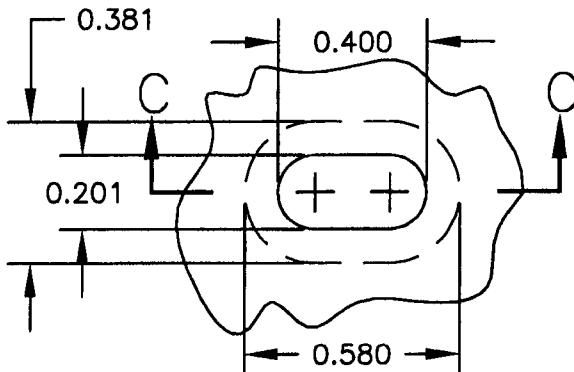
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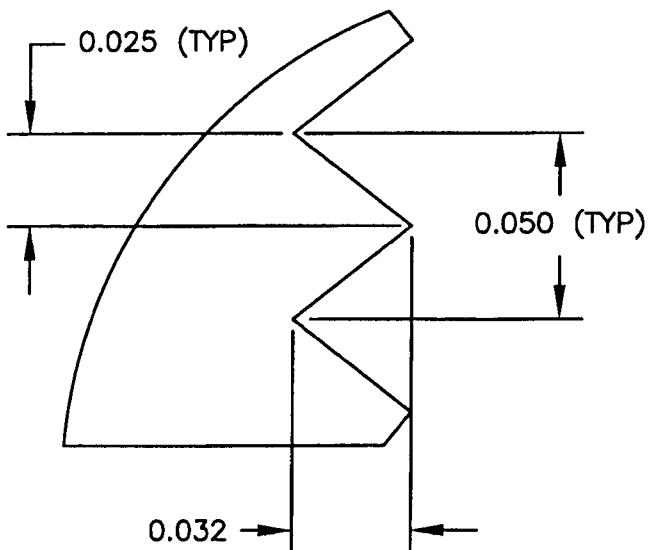
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DATE		REV. D SHEET 3 OF 10 TITLE: BRACKET ASSEMBLY SCALE: 1:1

DETAIL A:
SLOT DETAIL
SCALE 2:1
VIEW ROTATED



DETAIL B:
RIDGE DETAIL
PARTIAL SECTION
SCALE 1:20



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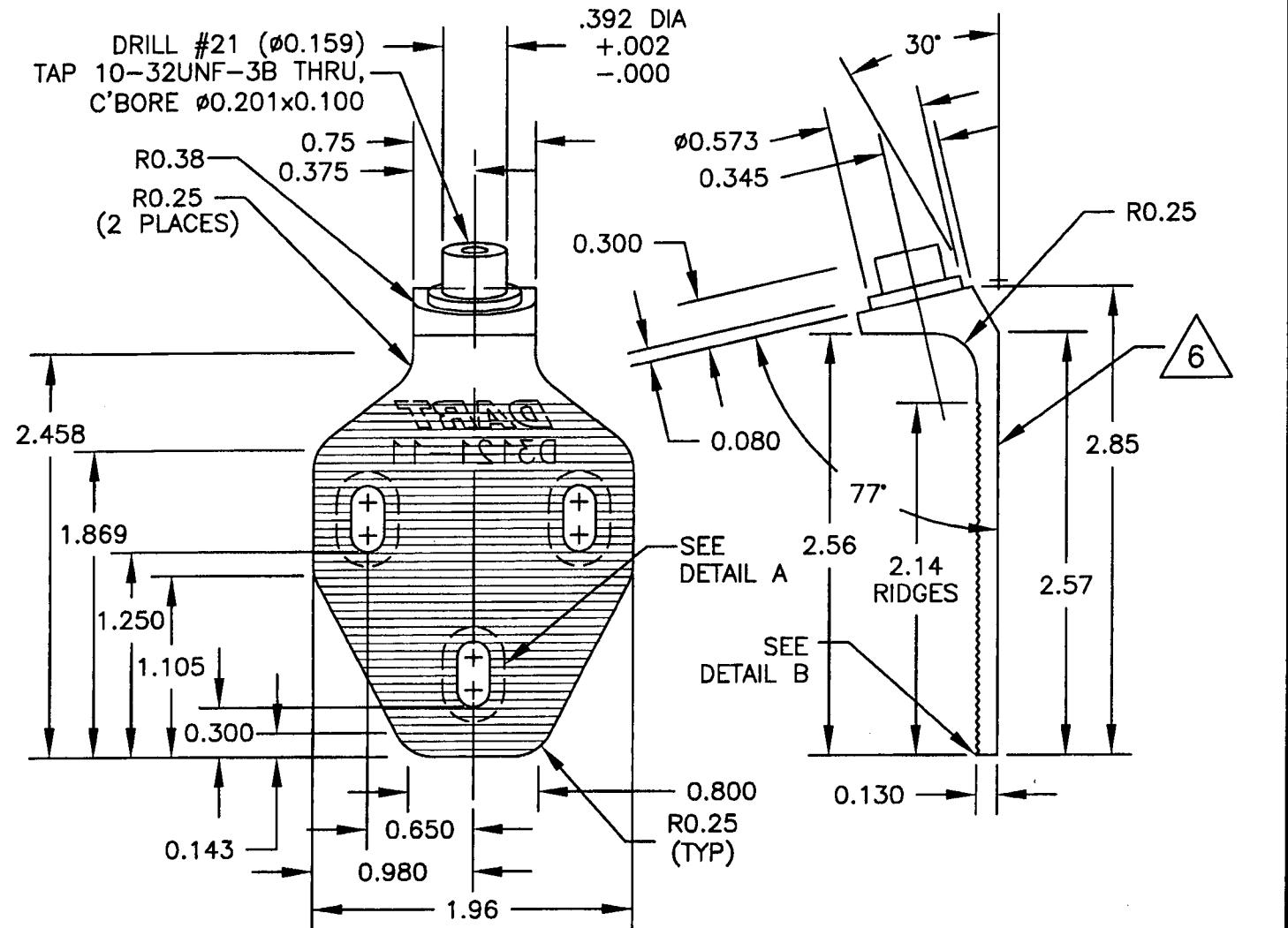
WORK ORDER
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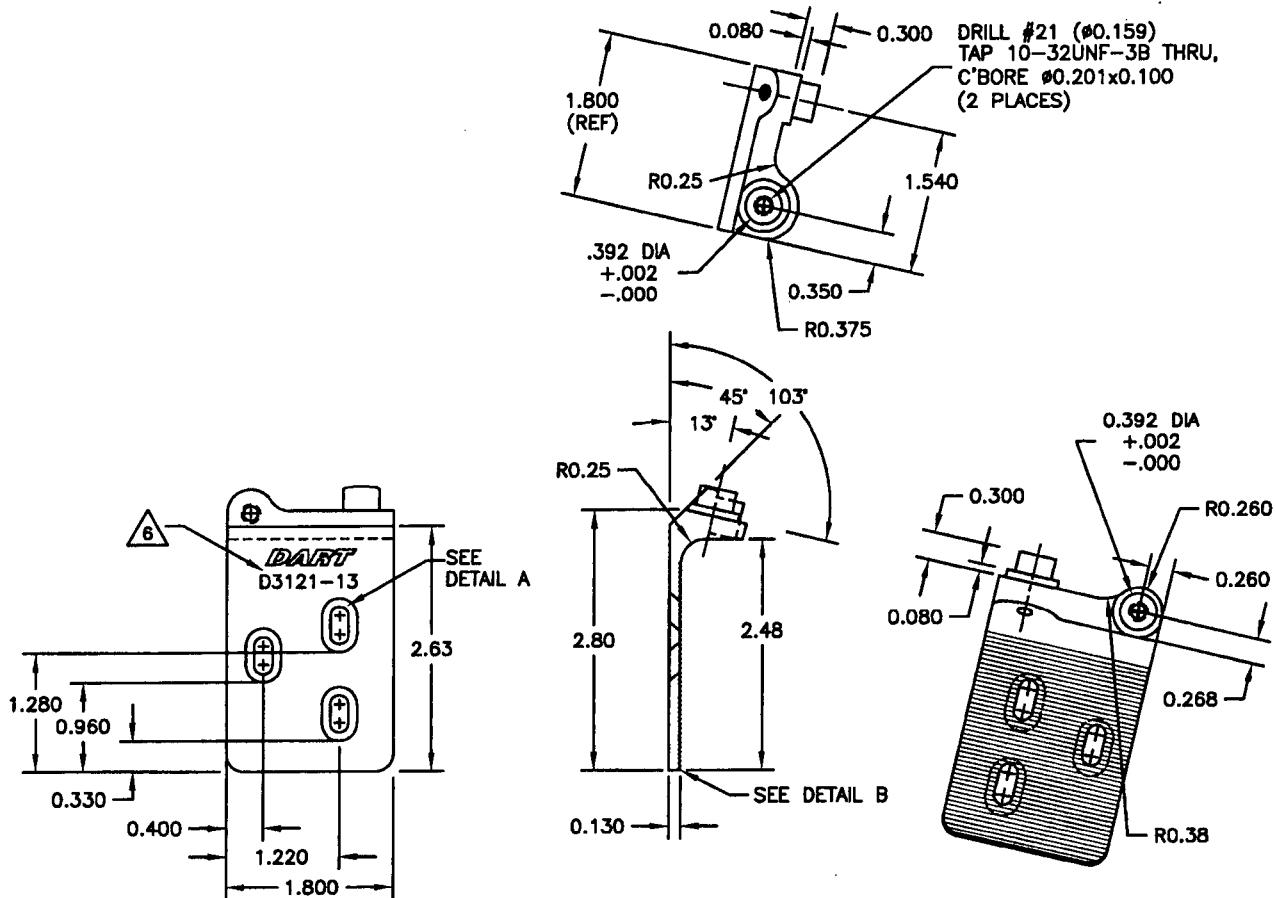
D3121-11 BRACKET

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

RELEASER

DART

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DATE 06.05.17		REV. D SHEET 5 OF 10 TITLE SCALE 1:2 BRACKET ASSEMBLY

**D3121-13 BRACKET (SHOWN)
D3121-14 BRACKET (OPPOSITE)**

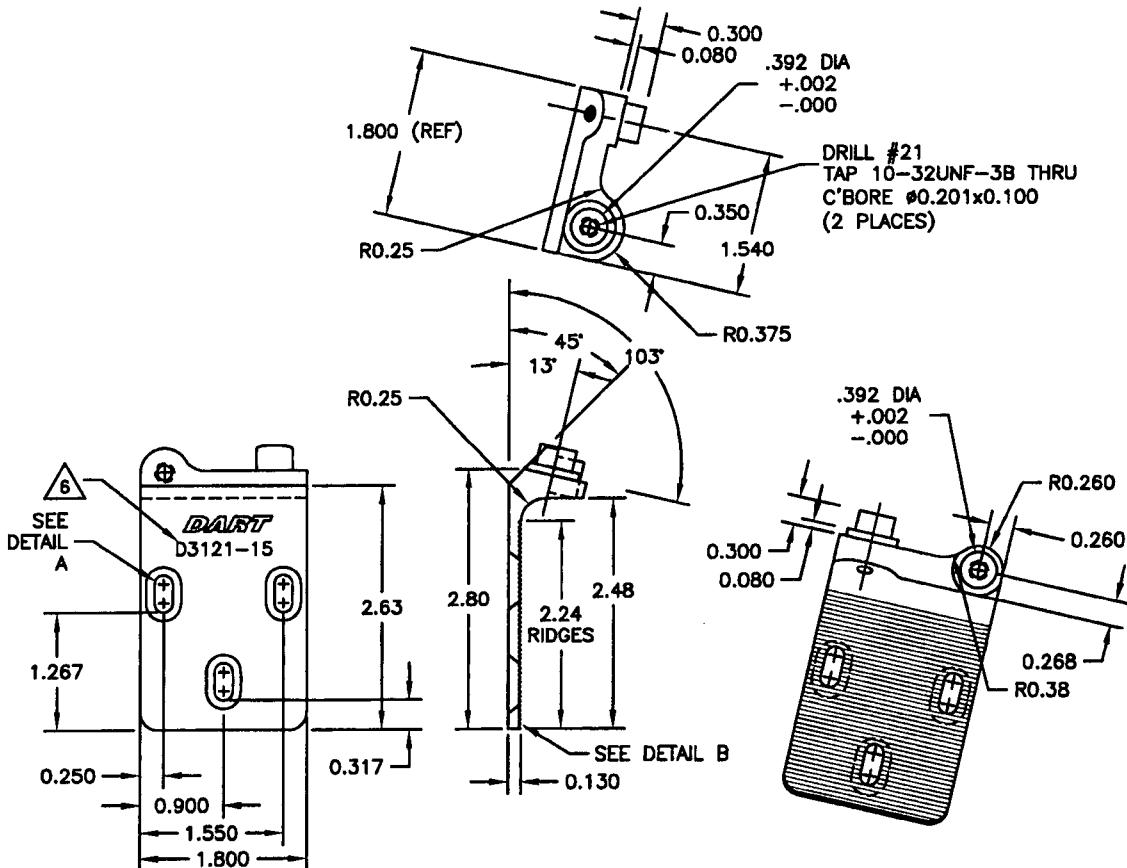
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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		D3121	SHEET 6 OF 10

DATE
06.05.17TITLE
BRACKET ASSEMBLYSCALE
1:2**D3121-15 BRACKET (SHOWN)****D3121-16 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi

- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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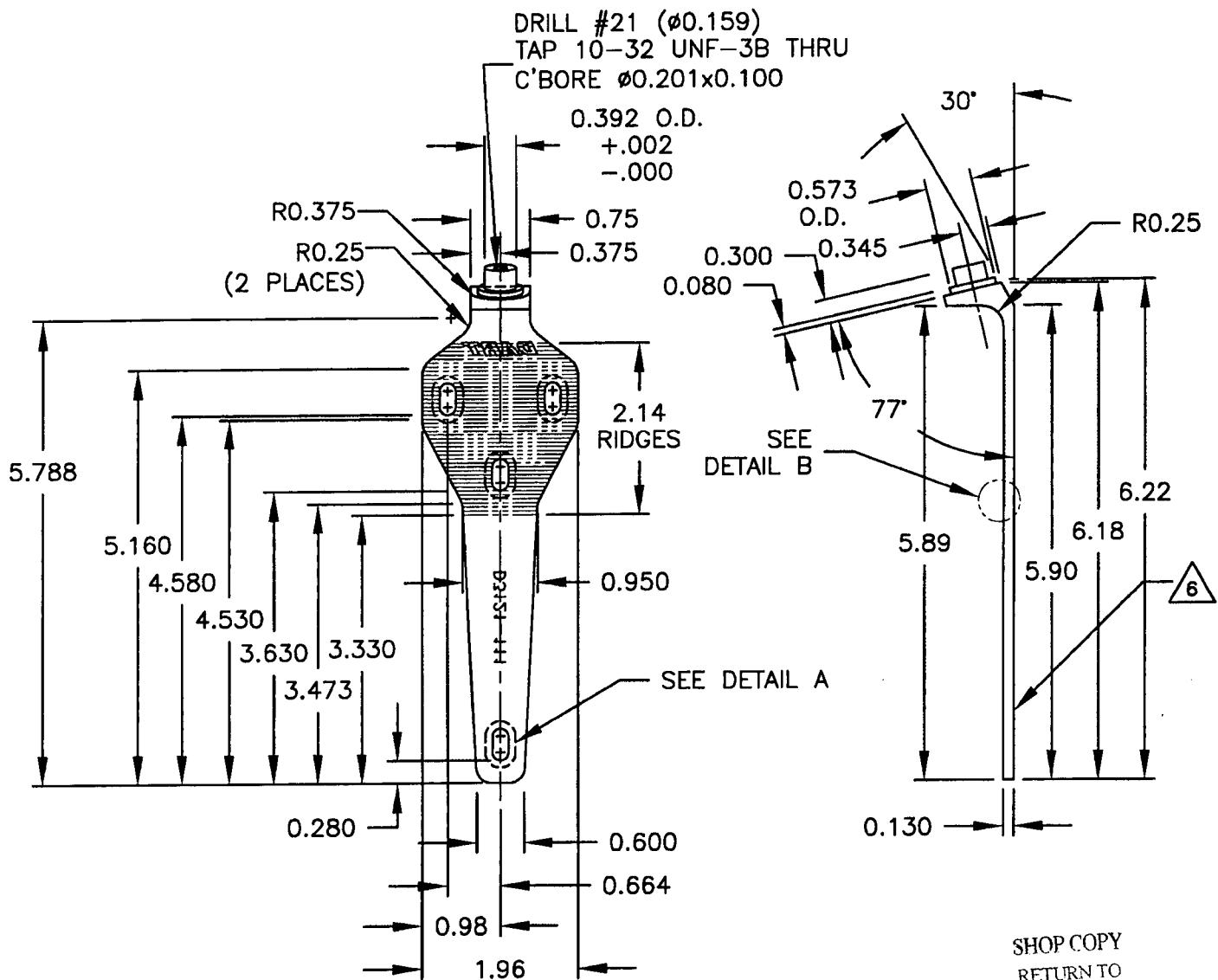
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CHECKED <i>J. J. H.</i>	APPROVED <i>✓</i>	DRAWING NO. D3121	REV. D SHEET 7 OF 10
DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:2



D3121-111 BRACKET

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

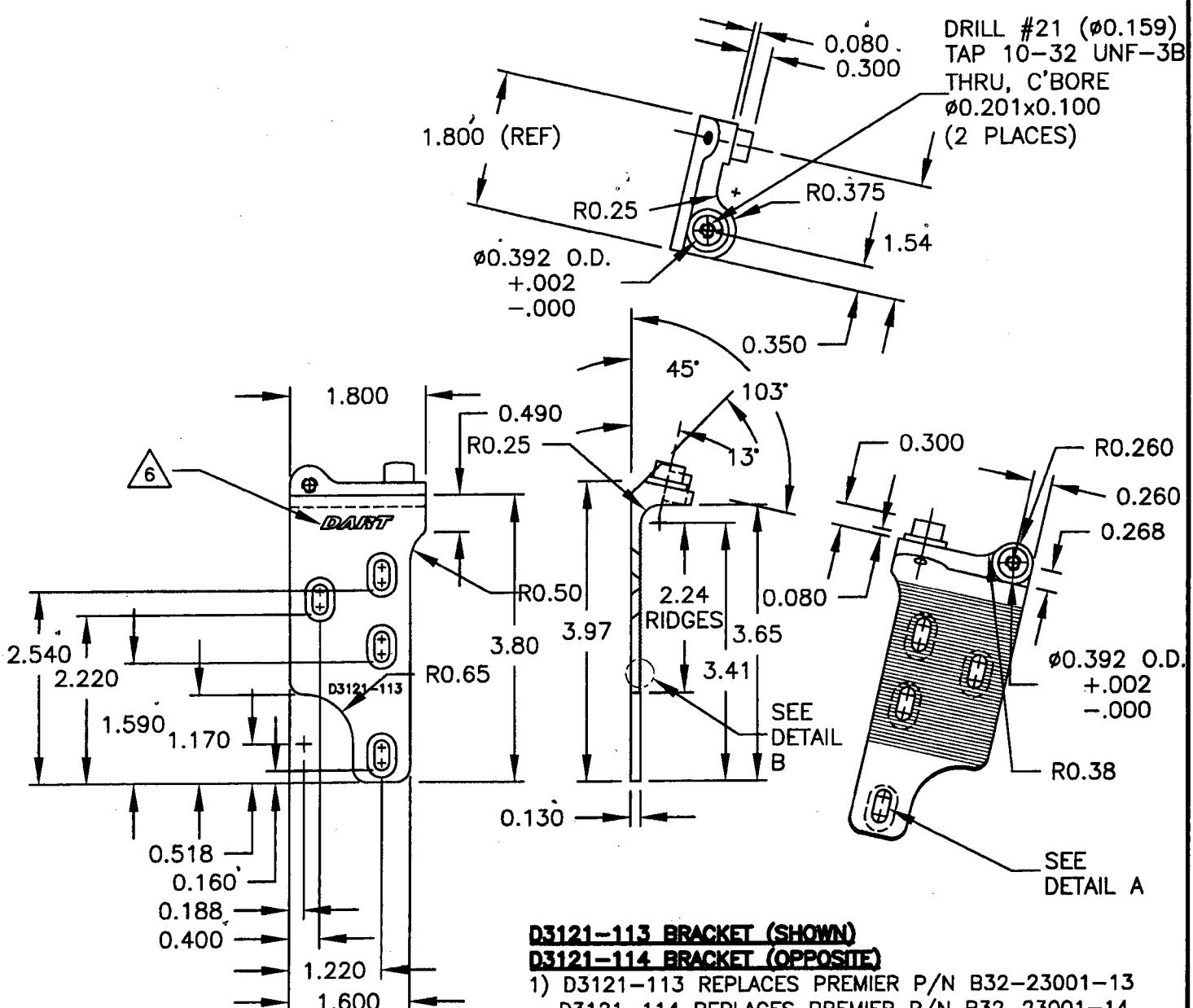
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		D3121	SHEET 8 OF 10
DATE	TITLE	SCALE	1:2
06.05.17	BRACKET ASSEMBLY		

**D3121-113 BRACKET (SHOWN)****D3121-114 BRACKET (OPPOSITE)**

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)

MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi

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06.06.02

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TOLERANCES ARE PER DART QSI 018 UNLESS
SUBJECT TO AMENDMENT OTHERWISE NOTED

WITHOUT NOTICE 4) ALL DIMENSIONS ARE IN INCHES

WORK ORDER 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

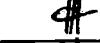
NO. 28826 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN

7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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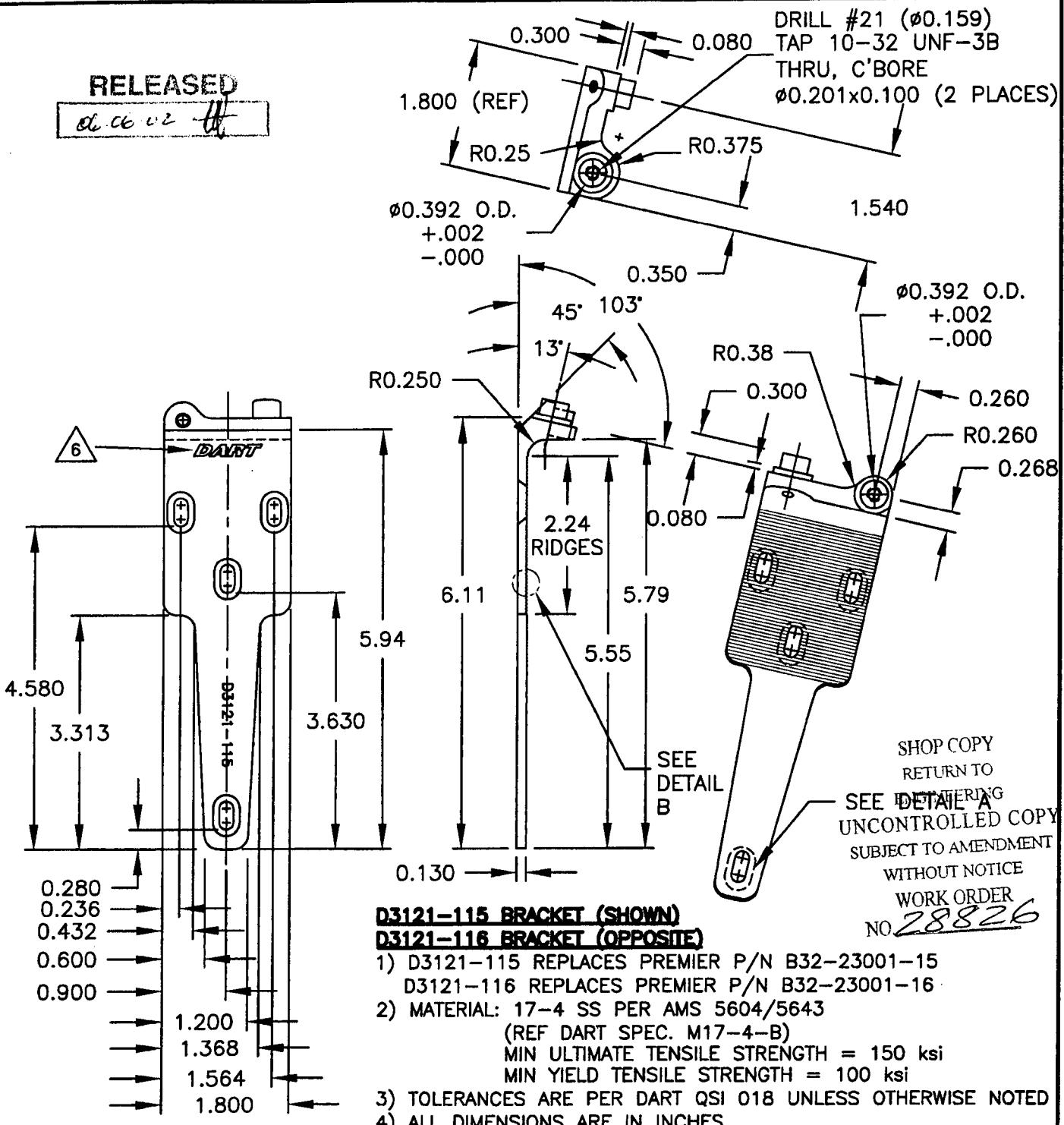
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DATE 04.02.18	TITLE BRACKET ASSEMBLY	SCALE 1:2	

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06.02.02 - ff



D3121-115 BRACKET (SHOWN) **D3121-116 BRACKET (OPPOSITE)** **NO 28826**

1) D3121-115 REPLACES PREMIER P/N B32-23001-15
D3121-116 REPLACES PREMIER P/N B32-23001-16

2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

4) ALL DIMENSIONS ARE IN INCHES

5) BREAK ALL SHARP EDGES 0.005 TO 0.015

6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN

7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

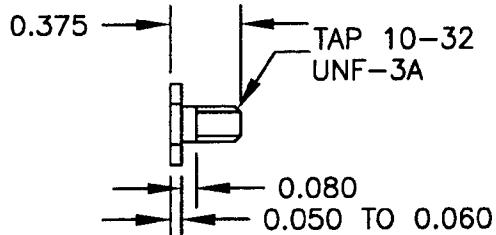
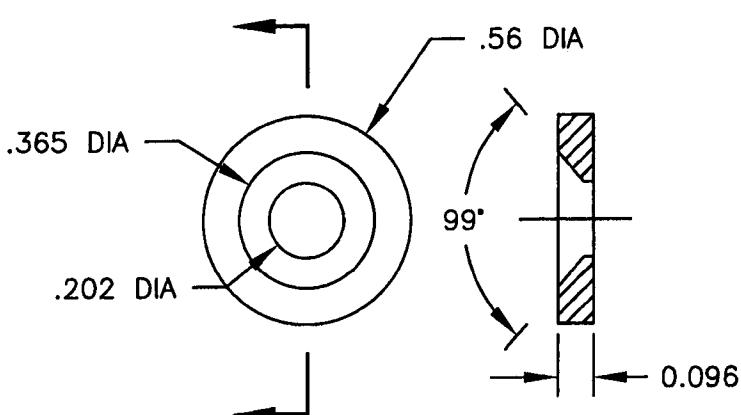
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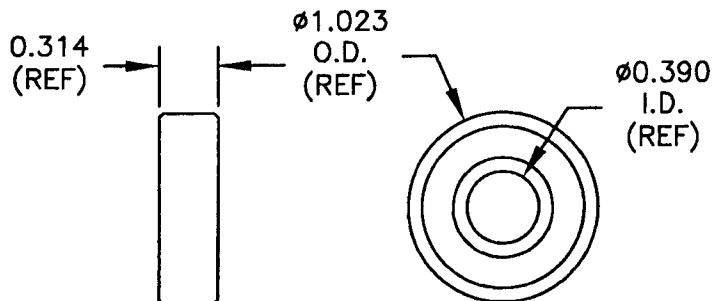
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CHECKED	APPROVED	DRAWING NO.	REV. D
DATE		D3121	SHEET 10 OF 10

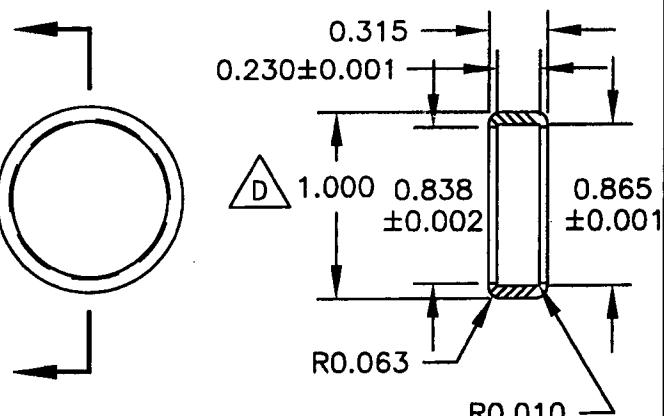
06.05.17 TITLE: BRACKET ASSEMBLY SCALE: 1:1

**D3121-17 WASHER (SCALE 2:1)**

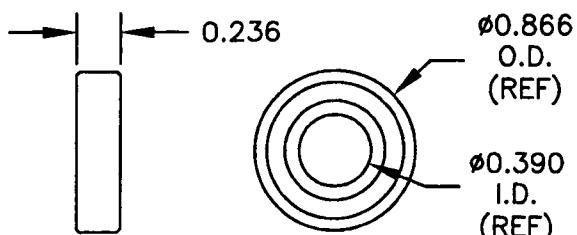
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-21 BOLT (SCALE 1:1)**

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

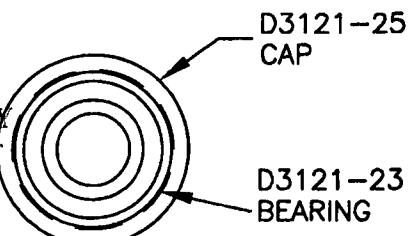
**D3121-19 BEARING (SCALE 1:1)**

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM
FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

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WORK ORDER
NO. 28826
D3121-241 BEARING ASSEMBLY (SCALE 1:1)

**D3121-23 BEARING (SCALE 1:1)**

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z
OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES

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